

Work Order ID 137068

137068

Page 1

Thursday, September 24, 2015 2:07:42 PM

Item ID: D2856-600

Revision ID:

Item Name: Abrasion Strip 6" Wide (Per Foot)

Start Date: 9/23/15

Start Qty: 54.00

Required Date: 9/23/15

Req'd Qty: 54.00

Reference:

Accept

OCT 07 2015

N900040100

Setup Start

NS1

Stop

NS2

Cust Item ID:

Customer:

Approvals:

Process Plan: MLJ

Date: SEP 25 2015

Tooling:

Date:

QC:

Date:

SPC (Y/N):

Date:

Run Start

NR1

Stop

NR2

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
--------------------------------	--------------------------	----------------------	---------	--------	--------------	---------------	---------------	------------------	----------------

Draw Nbr	Revision Nbr
D2856	Rev A

100

0.00

100

Purchasing

Purchasing

PURCHASING

Memo

0.00

Issue P/O: 30064 Material: Outdoor grade polyurethane protective clear tape 3M P/N 8681 (or 8681HS) - 108 foot rollSpecify for Clear Tape

CZ OCT 08 2015 216

110

0.00

110

Packaging

Packaging

Receive & Inspect for Damage & Mat'l Certs

Memo

0.00

Ensure material certification is attached

216 OCT 15 2015 216
DAS 13 9-19

120

0.00

120

QC

Quality Control

QC6- Inspect dimensions to drawing

Memo

0.00

Ensure Material certification comply to Dwg D

216 OCT 15 2015 216
DAS 38 9-89

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐					
Date :		Step #:		QTY Effective :			MRB (QSI042) Approval Completed By Lead hand / Supervisor Approval Verification QC / QA Coordinator Approval		
Description Work Order Deviation				Disposition					
Root Cause Environment ☐ Design ☐ Doc/Data ☐ Equip/Tooling ☐ Handling/Pre ☐ Material ☐ Internal Transport ☐ Tribal Knowledge ☐ LOA ☐ Substation ☐ Past Expiry Date ☐ Misidentified ☐ No Re-verification ☐ Operator ☐ Offset/Setup ☐ Supplier ☐ Training ☐ Use for Testing ☐ Poor Information ☐ Rushing ☐ Product Improvement ☐ Process Improvement ☐ Manufacturing Process ☐ Past Due ☐		FAULT CATEGORY Pressure/Forced ☐ Bending ☐ Centre Not Concentric ☐ Cracks ☐ Crimp/Kink/Ripple/Wave ☐ Cuffs ☐ Crushing ☐ Heat Treat ☐ Wave/Twist in Tube ☐ Marks/Chatter ☐ Temperature/Cure ☐ Set-up ☐ BOM/Route ☐ Broken/Damage/Defect ☐ Inspection Incomplete/Unqualified ☐ Contamination ☐ Countersink ☐ Cut Too Short ☐ Instructions Incomplete/Unclear ☐ Drill Holes ☐ Power Loss/Surge ☐ Folio/Program ☐ Grain ☐ Weld ☐ Wrong Stock Pulled ☐ Out of Sequence ☐ Off-set ☐ Misabeled ☐ Fit/Function ☐ Misaligned/off center ☐ Positioned Wrong ☐ Outside Dimensions ☐ Over/Under tolerance ☐ Part Incorrect ☐ Part Lost/Missing ☐ Part Moved ☐ Drawing ☐ Finish ☐ Misread ☐ Turning Sequence ☐							
		OTHER : ☐							

Work Order ID 137068

Thursday, September 24, 2015 2:07:42 PM

137068

Page 2

Item ID: D2856-600

Accept

N900040100

Setup

Start

NS1

Revision ID:

Stop

NS2

Item Name: Abrasion Strip 6" Wide (Per Foot)

Start Date: 9/23/15

Start Qty: 54.00

54

Cust Item ID:

Required Date: 9/23/15

Req'd Qty: 54.00

54

Customer:

Reference:

Approvals:

Process Plan: _____

Date: _____

Tooling: _____

Date: _____

Run

Start

NR1

QC: _____

Date: _____

SPC (Y/N): _____

Date: _____

Stop

NR2Sequence ID/
Work Center IDOperation
DescriptionSet Up/
Run Hours

Tool ID

Tool #

Plan
CodeAccept
QtyReject
QtyReject
NumberInsp.
Stamp

130

Identify as per dwg & Stock Location: 57418

0.00

130

Packaging

Memo

0.00

Packaging

140

QC21- Final Inspection - Work Order Release

0.00

140

QC

Memo

0.00

Quality Control

9-89 OCT 15 2014

OCT 19 2015

20151016

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS <table style="width:100%; border: none;"> <tr> <td style="border: none;">Skid-tube ☐</td> <td style="border: none;">Cross tube ☐</td> <td style="border: none;">Water Jet ☐</td> <td style="border: none;">Engineering ☐</td> </tr> <tr> <td style="border: none;">Machining ☐</td> <td style="border: none;">Small Fab ☐</td> <td style="border: none;">Prod. Eng. Coord. ☐</td> <td style="border: none;">Quality ☐</td> </tr> <tr> <td style="border: none;">Thermoforming ☐</td> <td style="border: none;">Finishing ☐</td> <td style="border: none;">Rec/Store/Packaging ☐</td> <td style="border: none;">Other ☐</td> </tr> <tr> <td style="border: none;">Large Fab ☐</td> <td style="border: none;">Composite ☐</td> <td style="border: none;">Supplier ☐</td> <td></td> </tr> </table>						Skid-tube ☐	Cross tube ☐	Water Jet ☐	Engineering ☐	Machining ☐	Small Fab ☐	Prod. Eng. Coord. ☐	Quality ☐	Thermoforming ☐	Finishing ☐	Rec/Store/Packaging ☐	Other ☐	Large Fab ☐	Composite ☐	Supplier ☐	
Skid-tube ☐	Cross tube ☐	Water Jet ☐	Engineering ☐																						
Machining ☐	Small Fab ☐	Prod. Eng. Coord. ☐	Quality ☐																						
Thermoforming ☐	Finishing ☐	Rec/Store/Packaging ☐	Other ☐																						
Large Fab ☐	Composite ☐	Supplier ☐																							
Date :		Step #:		QTY Effective :			MRB (QSI042) Approval																		
Description Work Order Deviation				Disposition																					
								Completed By																	
								Lead hand / Supervisor Approval Verification																	
								QC / QA Coordinator Approval																	
Root Cause		FAULT CATEGORY																							
Environment ☐ Design ☐ Doc/Data ☐ Equip/Tooling ☐ Handling/Pre ☐ Material ☐ Internal Transport ☐ Tribal Knowledge ☐ LOA ☐ Substation ☐ Past Expiry Date ☐ Misidentified ☐	No Re-verification ☐ Operator ☐ Offset/Setup ☐ Supplier ☐ Training ☐ Use for Testing ☐ Poor Information ☐ Rushing ☐ Product Improvement ☐ Process Improvement ☐ Manufacturing Process ☐ Past Due ☐	Pressure/Forced ☐ Bending ☐ Centre Not Concentric ☐ Cracks ☐ Crimp/Kink/Ripple/Wave ☐ Cuffs ☐ Crushing ☐ Heat Treat ☐ Wave/Twist in Tube ☐ Marks/Chatter ☐	Temperature/Cure ☐ Set-up ☐ BOM/Route ☐ Broken/Damage/Defect ☐ Inspection Incomplete/Unqualified ☐ Contamination ☐ Countersink ☐ Cut Too Short ☐ Instructions Incomplete/Unclear ☐ Drill Holes ☐	Power Loss/Surge ☐ Folio/Program ☐ Grain ☐ Weld ☐ Wrong Stock Pulled ☐ Out of Sequence ☐ Off-set ☐ Mislabeled ☐ Fit/Function ☐ Misaligned/off center ☐	Positioned Wrong ☐ Outside Dimensions ☐ Over/Under tolerance ☐ Part Incorrect ☐ Part Lost/Missing ☐ Part Moved ☐ Drawing ☐ Finish ☐ Misread ☐ Turning Sequence ☐	OTHER : ☐																			

Picklist Print

Thursday, September 24, 2015 2:07:41 PM

Page 1

Work Order ID: 137068

137068

Parent Item: D2856-600

D2856-600

Parent Item Name: Abrasion Strip 6" Wide (Per Foot)

Start Date: 9/23/15

Required Date: 9/23/15

Start Qty: 54.00

Required Qty: 54.00

Comments: IPP B 02.08.28 Re-format; Added clear & 108 foot roll to Step 2 KJ/RF

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Qty per Kit	Total Qty	Qty Issued	Date Issued	Status
3M8681-6		Purchased	No			100	f	0.0000	1	.54 216			

3M8681-6

Abrasion Strip 6"

OCT 15 2015

DAS
LS
9-23

DQA: _____ Date: _____

**WORK ORDER NON-CONFORMANCE / UPDATE**

QA Closed: _____ Date: _____

Work Order update only ☐

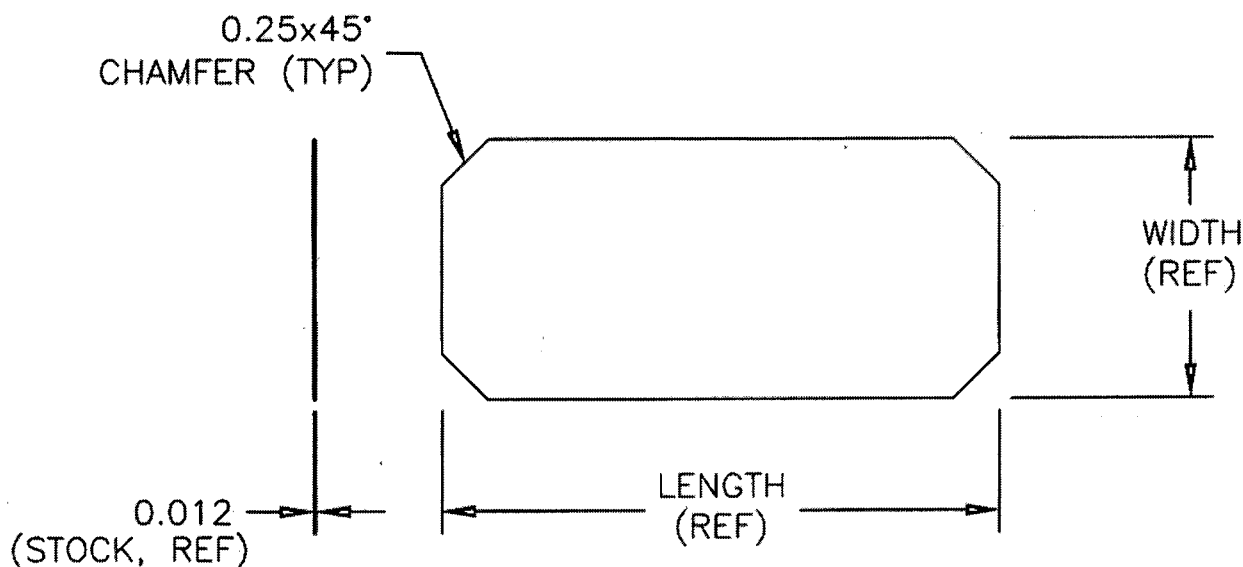
Work Order: _____ Part No. _____ NCR No. _____		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS <table style="width:100%; border: none;"> <tr> <td style="border: none;">Skid-tube ☐</td> <td style="border: none;">Cross tube ☐</td> <td style="border: none;">Water Jet ☐</td> <td style="border: none;">Engineering ☐</td> </tr> <tr> <td style="border: none;">Machining ☐</td> <td style="border: none;">Small Fab ☐</td> <td style="border: none;">Prod. Eng. Coord. ☐</td> <td style="border: none;">Quality ☐</td> </tr> <tr> <td style="border: none;">Thermoforming ☐</td> <td style="border: none;">Finishing ☐</td> <td style="border: none;">Rec/Store/Packaging ☐</td> <td style="border: none;">Other ☐</td> </tr> <tr> <td style="border: none;">Large Fab ☐</td> <td style="border: none;">Composite ☐</td> <td style="border: none;">Supplier ☐</td> <td></td> </tr> </table>						Skid-tube ☐	Cross tube ☐	Water Jet ☐	Engineering ☐	Machining ☐	Small Fab ☐	Prod. Eng. Coord. ☐	Quality ☐	Thermoforming ☐	Finishing ☐	Rec/Store/Packaging ☐	Other ☐	Large Fab ☐	Composite ☐	Supplier ☐																																							
Skid-tube ☐	Cross tube ☐	Water Jet ☐	Engineering ☐																																																												
Machining ☐	Small Fab ☐	Prod. Eng. Coord. ☐	Quality ☐																																																												
Thermoforming ☐	Finishing ☐	Rec/Store/Packaging ☐	Other ☐																																																												
Large Fab ☐	Composite ☐	Supplier ☐																																																													
Date :		Step #:		QTY Effective :			MRB (QSI042) Approval																																																								
Description Work Order Deviation				Disposition				Completed By																																																							
								Lead hand / Supervisor Approval Verification																																																							
								QC / QA Coordinator Approval																																																							
Root Cause				FAULT CATEGORY																																																											
Environment ☐	Design ☐	Doc/Data ☐	Equip/Tooling ☐	Handling/Pre ☐	Material ☐	Internal Transport ☐	Tribal Knowledge ☐	LOA ☐	Substation ☐	Past Expiry Date ☐	Misidentified ☐	No Re-verification ☐	Operator ☐	Offset/Setup ☐	Supplier ☐	Training ☐	Use for Testing ☐	Poor Information ☐	Rushing ☐	Product Improvement ☐	Process Improvement ☐	Manufacturing Process ☐	Past Due ☐	Pressure/Forced ☐	Bending ☐	Centre Not Concentric ☐	Cracks ☐	Crimp/Kink/Ripple/Wave ☐	Cuffs ☐	Crushing ☐	Heat Treat ☐	Wave/Twist in Tube ☐	Marks/Chatter ☐	Temperature/Cure ☐	Set-up ☐	BOM/Route ☐	Broken/Damage/Defect ☐	Inspection Incomplete/Unqualified ☐	Contamination ☐	Countersink ☐	Cut Too Short ☐	Instructions Incomplete/Unclear ☐	Drill Holes ☐	Power Loss/Surge ☐	Folio/Program ☐	Grain ☐	Weld ☐	Wrong Stock Pulled ☐	Out of Sequence ☐	Off-set ☐	Mislabeled ☐	Fit/Function ☐	Misaligned/off center ☐	Positioned Wrong ☐	Outside Dimensions ☐	Over/Under tolerance ☐	Part Incorrect ☐	Part Lost/Missing ☐	Part Moved ☐	Drawing ☐	Finish ☐	Misread ☐	Turning Sequence ☐
																								OTHER :																																							



DESIGN <i>UP</i>	DRAWN BY <i>UP</i>	DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA	
CHECKED <i>f</i>	APPROVED <i>f</i>	DRAWING NO. D2856	REV. A SHEET 1 OF 1
DATE 00.11.17		TITLE ABRASION STRIP	SCALE NTS
A	00.11.17	NEW ISSUE	

RELEASED
00.11.24

SPECIFICATION CONTROL DRAWING



MATERIAL: OUTDOOR GRADE POLYURETHANE PROTECTIVE TAPE
3M, P/N 8681 (OR 8681HS)
THICKNESS: 0.012"

SPECIFICATION: D2856-XXX-YYY ABRASION STRIP

WIDTH
LENGTH

EG: 1.75"x2.50" ABRASION STRIP = D2856-175-250

TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED

Copyright © 2000 by DART AEROSPACE LTD

THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR COPIED OR COMMUNICATED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE LTD.

SHOP COPY
RETURN TO
ENGINEERING
UNCONTROLLED COPY
SUBJECT TO AMENDMENT
WITHOUT NOTICE
WORK ORDER
137068
1509-25



Dart Aerospace Ltd.
1270 Aberdeen Street
Hawkesbury, ON K6A 1K7
Tel: 613 632 9577
Fax: 613 632 1053

PURCHASE ORDER

Purchase Order ID PO30064

Purchase Order Date 10/8/2015

PO Print Date 10/8/2015

Page Number 1 of 2

Order From :

AVIALL
PO BOX 842275

DALLAS, TX 75284-2275
USA

VU-AVI003

Ship To : DART AEROSPACE LTD

1270 ABERDEEN
HAWKESBURY, ON K6A 1K7
CANADA

Contact Name

Vendor Phone 905-676-1695

Ship To Contact

Ship To Phone

Ship Via: FedEx Overnight collect

Ship Acct:

Buyer

Chantal Lavoie

Customer POID

Customer Tax # 10127-2607

Terms Net 30

Currency USD

FOB EXW - (Ex Works)

Line Nbr	Reference Vendor Part Number Line Comments Delivery Comments	Description/ Mfg ID	Req Date/ Taxable Promise Date	CD	Req Qty/ Unit of Measure	PO Unit Price	Extended Price
----------	---	------------------------	--------------------------------------	----	--------------------------------	---------------	-------------------

1	3M8681-6	Abrasion Strip 6"	11/13/2015 Yes 11/13/2015		216.00 f	\$10.65	\$2,299.78
---	----------	-------------------	---------------------------------	--	-------------	---------	------------

ASD PER DWG D2856 REV. A
B137068

OUTDOOR GRADE POLYURETHANE CLEAR TAPE 3M
P/N: 8681 OR 8681HS CLEAR TAPE 108 FT PER ROLL

Line Total: \$2,299.78

2	71401-45	PROCUREMENT QUALITY CLAUSES	11/13/2015 No 11/13/2015		1.00	\$0.00	\$0.00
---	----------	--------------------------------	--------------------------------	--	------	--------	--------

Procurement Quality Clauses

A005 RIGHT OF ENTRY

A012 CHEMICAL AND PHYSICAL TEST REPORTS

A016 PERSONNEL QUALIFICATION

A013 SHELF LIFE CONTROLLED MATERIAL, 80% AT
RECEIPT

A026 CERTIFICATION OF MATERIAL CONFORMANCE

A032 PUBLIC LAW 101-592 FASTENER QUALITY ACT

A040 NOTIFICATION OF QUALITY ESCAPE

A041 QUALITY MANAGEMENT SYSTEM

A043 RETENTION OF QUALITY DOCUMENT

PO Instructions: Fedex Acc#151793240

Note:

10/8/2015



PACKING LIST



PAGE:1 of 1
DATE:13OCT15
TIME:18:49:16
EMP:00000000
ORD TYP: ZOR 132
CURRENCY:USD
TERMS:Net 30

DELIVERY NUMBER: 8002331262

ROUTE: US FedEx International Priority

CUSTOMER PO:30064
ORDER NUMBER:1001600066
ORDER DATE:13OCT15

B 10003951
I DART AEROSPACE LTD
L 1270 ABERDEEN STREET
L HAWKESBURY ON K6A 1K7
T CANADA
O

S 10003951
H DART AEROSPACE LTD
I 1270 ABERDEEN STREET
P HAWKESBURY ON K6A 1K7
T CANADA
O

S 1000
H AVIALL CENTRAL WAREHOUSE
I DALLAS CDC
P 2750 REGENT BLVD
F DFW AIRPORT TX 75261-9048
R USA
M

LINE	PO LINE	MFG	ITEM DESCRIPTION	ORDER QUANTITY	SHIP QUANTITY	QUANTITY BACK ORDER	UOM	LIST PRICE	CUSTOMER PRICE	EXTENDED CUSTOMER PRICE
00010	0	27	8681-6CLR TAPE: PP,CLR,6INX336YD	2	1	1	ROL	1,869.15	1,149.89	1,149.89
BATCH 7364089125				Exp Date: 18MAR17		1				

✓
15/10/15
SD

This is not an Invoice.
For payment processing, please refer to Invoice.

The recipient of these goods agrees to comply with all export regulations governing the transfer, sale, lease, or use of these goods.
Diversion contrary to U.S. Law is prohibited.

CERTIFICATE OF CONFORMANCE

It is hereby certified that Aviall Services, Inc., is an approved distributor and meets all requirements of ISO9001, AS9100, AS9120 and AC 00-56 at 2750 Regent Blvd. DFW Airport, Texas. The products, articles or parts referenced on this document are in new or overhauled condition and were purchased from an approved source (FAA, EASA, TCCA, Mil Spec or Commercial). The Original Manufacturers' Certifications are maintained on file at our central office location, and copies are available upon request or at Aviall.com. For overhauled or repaired products, articles or parts, the original FAA 8130-3 / EASA Form 1 (Return to Service) or Yellow Tag, from the FAA/JAA/EASA approved Air Agency are attached to the component.

Signature

13OCT15
Date

DISCOUNT TERMS APPLY ONLY TO SUB TOTAL. ALL
RETURNED MERCHANDISE SUBJECT TO HANDLING
FEE.

THIS IS TO CERTIFY THAT AVIALL HAS COMPLIED WITH
THE PROVISIONS OF THE FAIR LABOR ACT OF 1938
AMENDED.

CUSTOMER COPY



A BOEING COMPANY

AVIALL SERVICES INC
2750 REGENT BLVD
DFW AIRPORT TX 75261
USA

Commercial Invoice

Government Transaction Number	NOEEI FTR 30.36
Delivery Number	8002331262
Tracking Number	Commercial Invoice Number 9302844660
Incoterms EXW Shipping Point	Ship Date 13 October, 2015

Sold To DART AEROSPACE LTD 1270 ABERDEEN STREET HAWKESBURY ON K6A 1K7 CANADA	10003951	Ultimate Consignee DART AEROSPACE LTD 1270 ABERDEEN STREET HAWKESBURY ON K6A 1K7 CANADA	10003951	Ship To DART AEROSPACE LTD 1270 ABERDEEN STREET HAWKESBURY ON K6A 1K7 CANADA	10003951	Freight Forwarder FEDEX FEDEX NATIONAL LTL INC PO BOX 94515 PALATINE IL 60094-4515 USA Tax Number: 20-4734803	400010
--	----------	---	----------	--	----------	---	--------

Comments:

Item	Part Number & Description	Country of Origin	Quantity	UOM	Unit Value USD	Extended Value USD
10	8681-6CLR - TAPE: PP,CLR,6INX336YD Harmonized Tariff: 3919102040 Export Classification: EAR99 Authorization: NLRAT_OCT_2015 Sales Order: 1001600066 PO: 30064 Batch Number: 7364089125	US	1	ROL	1,149.89	1,149.89

Gross Value	1,149.89
Add on Charges	
Tax Value	
Freight Charges	
Total Net Value	1,149.89

FOR CUSTOMS PURPOSES ONLY
NOT A BILLING INVOICE

These commodities, technology or software were exported from the United States in accordance with the Export Administration Regulations. Diversion contrary to US laws is prohibited.

3M PACKING LIST

P.O. NUMBER 0045307047

Thu Sep 24 15:49:15 CDT 2015



SHIP TO:

AVIALL INC
DISTRIBUTION SERVICES
2750 REGENT BLVD
DALLAS, TX 75261-4405

CHARGE TO:

AVIALL SERVICES INC
PO BOX 619048
DALLAS, TX 75261-9048

THIS PACKING LIST CONTAINS

Pieces: 1
Weight: 12.00

MARK SHIPPING LABEL:

LINE NBR	YOU ORDERED	SHIPPED	BACK ORDERED	BILL UNIT	UPC / 3M-ID	PRODUCT	TOT LINE WEIGHT	TOTAL PIECES
000020	2	(2)		RLS	0-00-21200-64682-9	PT# 8681-6CLR=27 8681HS TRANSPARENT SKIP SLIT 6 IN X 36 YD BULK 70-0061-4817-8	12.00	(1)

NOTES:

CUST PO RELEASE NBR: 0 Y
QUESTION? CALL YOUR 3M CUSTOMER SERVICE PROVIDER:
KIA XIONG 3M AEROSPACE BLDG 225-05-S-14
SAINT PAUL MN 55144-3224
PHONE (800) 235-2376 FAX (800) 435-3082

OFFICE USE

INVOICE #: TG88058

SHIP FROM LOC: AR

WAVE #:

WORK LIST ID #:

EMPLOYEE #:

PRINTING #: 1

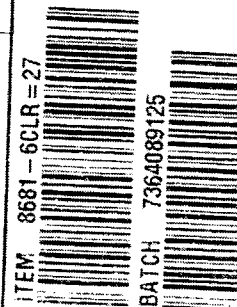
FORM #: A1

CUSTOMER ORDER DATE: 09/24/2015

SHIP DATE:

ORIGINAL INVOICE #:

BHORTON
10/02/15



Thank you for your order

PAGE 1 of 1

Thank you for your order

AVIALL - TRUE CERTIFIED COPY | 10/13/2015 | Ship #: 8002331262 | Line: 10 | 7364089125 | Qty: 1 | CPO: 30064



Certificate of Lot Conformance

3M ABERDEEN TAPE
610 BROWN COUNTY 19 N
ABERDEEN SD 574013334 US

AVIALL INC DISTRIBUTION SERVICES
2750 REGENT BLVD
DALLAS TX 752614405

Date certificate is prepared: Sep-25-2015

The 3M product listed below was produced in accordance with standard manufacturing processes for the product in effect at the time of manufacture.

3M Invoice Number TG88058	Customer PO Number 0045307047	Customer Part Number 8681-6CLR=27
3M Stock Number 70-0061-4817-8 UPC Number 00021200646829	Product Description 8681HS TRANSPARENT SKIP SLIT 6 IN X 36 YD BULK	
Shelf Life 24 MONTHS FROM DATE OF MFG		Storage Condition for this Product GENERAL WAREHOUSE STORAGE (<+27C/80F)

Lot Number: 5077

Date of Manufacture: Mar-18-2015

Lot Number: 5230

Date of Manufacture: Aug-18-2015

Please contact your 3M Customer Service Representative if you have any questions.

Warranty and Limited Remedy: Unless stated otherwise in 3M's product literature, packaging inserts or product packaging for individual products, 3M warrants that each 3M product meets the applicable 3M specifications at the time 3M ships the product. Individual products may have additional or different warranties as stated on product literature, package inserts or product packages. 3M MAKES NO OTHER WARRANTIES OR CONDITIONS, EXPRESS OR IMPLIED, INCLUDING, BUT NOT LIMITED TO, ANY IMPLIED WARRANTY OR CONDITION OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE OR ANY IMPLIED WARRANTY OR CONDITION ARISING OUT OF A COURSE OF DEALING, CUSTOM OR USAGE OF TRADE. User is responsible for determining whether the 3M product is fit for a particular purpose and suitable for user's application. If the 3M product is shown to be nonconforming within the warranty period, your exclusive remedy and 3M's sole obligation will be, at 3M's option, to replace the nonconforming 3M product or refund the purchase price.

Limitation of Liability: Except where prohibited by law, 3M will not be liable for any loss or damage arising from the 3M product, whether direct, indirect, special, incidental or consequential, regardless of the legal theory asserted, including warranty, contract, negligence or strict liability.

This certificate or any information contained in it does not amend or change any applicable 3M terms and conditions of sale.

Authorized by: Greg Douglas 	Title: FK51157	Date Signed: Sep-25-2015
--	--------------------------	------------------------------------



Material Safety Data Sheet

Copyright, 2011, 3M Company. All rights reserved. Copying and/or downloading of this information for the purpose of properly utilizing 3M products is allowed provided that: (1) the information is copied in full with no changes unless prior written agreement is obtained from 3M, and (2) neither the copy nor the original is resold or otherwise distributed with the intention of earning a profit thereon.

This material safety data sheet (MSDS) is provided as a courtesy in response to a customer request. This product is not regulated under, and a MSDS is not required for this product by the OSHA Hazard Communication Standard (29 CFR 1910.1200) because, when used as recommended or under ordinary conditions, it should not present a health and safety hazard. However, use or processing of the product not in accordance with the product's recommendations or not under ordinary conditions may affect the performance of the product and may present potential health and safety hazards.

SECTION 1: PRODUCT AND COMPANY IDENTIFICATION

PRODUCT NAME: 3M™ Polyurethane Protective Tape 8681, 8681HS Transparent

MANUFACTURER: 3M

DIVISION: Aerospace Aircraft Maintenance Division

ADDRESS: 3M Center, St. Paul, MN 55144-1000

EMERGENCY PHONE: 1-800-364-3577 or (651) 737-6501 (24 hours)

Issue Date: 07/14/11

Supersedes Date: 01/21/11

Document Group: 26-0261-3

Product Use:

Intended Use: Protective Tape

SECTION 2: INGREDIENTS

<u>Ingredient</u>	<u>C.A.S. No.</u>	<u>% by Wt</u>
THERMOPLASTIC POLYURETHANE, NITRIN 870630-6538P	Trade Secret	80 - 90
ACRYLIC ACID-ISOOCTYL ACRYLATE POLYMER	9017-68-9	10 - 20

SECTION 3: HAZARDS IDENTIFICATION

3.1 EMERGENCY OVERVIEW

Specific Physical Form: Roll of Tape

Odor, Color, Grade: Transparent

General Physical Form: Solid

Immediate health, physical, and environmental hazards: This product, when used under reasonable conditions and in accordance with the 3M directions for use, should not present a health hazard. However, use or processing of the product in a manner not in

accordance with the product's directions for use may affect the performance of the product and may present potential health and safety hazards.

3.2 POTENTIAL HEALTH EFFECTS

Eye Contact:

No health effects are expected.

Skin Contact:

No health effects are expected.

Inhalation:

No health effects are expected.

Ingestion:

No health effects are expected.

SECTION 4: FIRST AID MEASURES

4.1 FIRST AID PROCEDURES

The following first aid recommendations are based on an assumption that appropriate personal and industrial hygiene practices are followed.

Eye Contact: No need for first aid is anticipated.
Skin Contact: No need for first aid is anticipated.
Inhalation: No need for first aid is anticipated.
If Swallowed: No need for first aid is anticipated.

SECTION 5: FIRE FIGHTING MEASURES

5.1 FLAMMABLE PROPERTIES

Autoignition temperature	No Data Available
Flash Point	Not Applicable
Flammable Limits(LEL)	Not Applicable
Flammable Limits(UEL)	Not Applicable
OSHA Flammability Classification:	Not Applicable

5.2 EXTINGUISHING MEDIA

Use fire extinguishers with class B extinguishing agents (e.g., dry chemical, carbon dioxide).

5.3 PROTECTION OF FIRE FIGHTERS

Special Fire Fighting Procedures: Wear full protective equipment (Bunker Gear) and a self-contained breathing apparatus (SCBA).

Unusual Fire and Explosion Hazards: Not applicable. No unusual fire or explosion hazards are anticipated.

Note: See STABILITY AND REACTIVITY (SECTION 10) for hazardous combustion and thermal decomposition information.

SECTION 6: ACCIDENTAL RELEASE MEASURES

6.1. Personal precautions, protective equipment and emergency procedures

Not applicable.

6.2. Environmental precautions

Not applicable.

Clean up methods

Sweep up.

SECTION 7: HANDLING AND STORAGE

7.1. HANDLING

This product is considered to be an article which does not release or otherwise result in exposure to a hazardous chemical under normal use conditions. Use general dilution ventilation and/or local exhaust ventilation to control airborne exposures to below Occupational Exposure Limits. If ventilation is not adequate, use respiratory protection equipment.

7.2. STORAGE

Not applicable.

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1. ENGINEERING CONTROLS

Not applicable.

8.2. PERSONAL PROTECTIVE EQUIPMENT (PPE)

8.2.1. Eye/Face Protection

Not applicable.

8.2.2. Skin Protection

Not applicable.

8.2.3. Respiratory Protection

Under normal use conditions, airborne exposures are not expected to be significant enough to require respiratory protection.

8.2.4. Prevention of Swallowing

Not applicable.

8.3. EXPOSURE GUIDELINES

None Established

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

Specific Physical Form:
Odor, Color, Grade:

Roll of Tape
Transparent

General Physical Form:	Solid
Autoignition temperature	No Data Available
Flash Point	Not Applicable
Flammable Limits(LFL)	Not Applicable
Flammable Limits(UEL)	Not Applicable
Boiling Point	Not Applicable
Vapor Density	Not Applicable
Vapor Pressure	Not Applicable
Specific Gravity	1.0 [Ref Sub. WATER = 1]
pH	Not Applicable
Melting point	Not Applicable
Solubility in Water	N/A
Evaporation rate	Not Applicable
Volatile Organic Compounds	Not Applicable
Kow - Oct/Water partition coef	Not Applicable
Percent volatile	Not Applicable
VOC Less H2O & Exempt Solvents	Not Applicable
Viscosity	Not Applicable

SECTION 10: STABILITY AND REACTIVITY

Stability: Stable

Materials and Conditions to Avoid:

10.1 Conditions to avoid

None known

10.2 Materials to avoid

None known

Hazardous Polymerization: Hazardous polymerization will not occur

Hazardous Decomposition or By-Products

<u>Substance</u>	<u>Condition</u>
Carbon monoxide	During Combustion
Carbon dioxide	During Combustion
Hydrogen Cyanide	During Combustion

Hazardous Decomposition: Under recommended usage conditions, hazardous decomposition products are not expected. Hazardous decomposition products may occur as a result of oxidation, heating, or reaction with another material.

SECTION 11: TOXICOLOGICAL INFORMATION

Please contact the address listed on the first page of the MSDS for Toxicological Information on this material and/or its components.

SECTION 12: ECOLOGICAL INFORMATION

ECOTOXICOLOGICAL INFORMATION

Not applicable.

CHEMICAL FATE INFORMATION

Not applicable.

SECTION 13: DISPOSAL CONSIDERATIONS

Waste Disposal Method: Dispose of waste product in a sanitary landfill. As a disposal alternative, incinerate in an industrial or commercial facility.

Since regulations vary, consult applicable regulations or authorities before disposal.

SECTION 14: TRANSPORT INFORMATION

ID Number(s):

70-0000-8032-8, 70-0000-8099-7, 70-0061-1081-7, 70-0061-1015-1, 70-0061-1081-6, 70-0061-2293-4, 70-0061-4817-8, 70-0061-5129-7, 70-0061-7892-8, 70-0061-9287-9, 70-0061-9288-7, 70-0061-9296-3, 70-0061-9291-1, 70-0061-9310-9, 70-0709-1595-7, 70-0710-4785-9

Not regulated per U.S. DOT, IATA or IMO.

These transportation classifications are provided as a customer service. As the shipper YOU remain responsible for complying with all applicable laws and regulations, including proper transportation classification and packaging. 3M transportation classifications are based on product formulation, packaging, 3M policies and 3M understanding of applicable current regulations. 3M does not guarantee the accuracy of this classification information. This information applies only to transportation classification and not the packaging, labeling, or marking requirements. The original 3M package is certified for U.S. ground shipment only. If you are shipping by air or ocean, the package may not meet applicable regulatory requirements.

SECTION 15: REGULATORY INFORMATION

US FEDERAL REGULATIONS

Contact 3M for more information.

311/312 Hazard Categories:

Fire Hazard - No Pressure Hazard - No Reactivity Hazard - No Immediate Hazard - No Delayed Hazard - No

STATE REGULATIONS

Contact 3M for more information.

CHEMICAL INVENTORIES

This product is an article as defined by TSCA regulations, and is exempt from TSCA Inventory listing requirements.

Contact 3M for more information.

Additional Information: Pigments in this product can include: carbon black (135-86-4), titanium dioxide (13463-67-7) and/or gray pigment (unknown)

INTERNATIONAL REGULATIONS

Contact 3M for more information.

This MSDS has been prepared to meet the U.S. OSHA Hazard Communication Standard, 29 CFR 1910.1200.

SECTION 16: OTHER INFORMATION

NEPA Hazard Classification

Hazbth: 0 Flammability: 1 Reactivity: 0 Special Hazards: None

National Fire Protection Association (NFPA) hazard ratings are designed for use by emergency response personnel to address the hazards that are presented by short-term, acute exposure to a material under conditions of fire, spill or similar emergencies. Hazard ratings are primarily based on the inherent physical and toxic properties of the material but also include the toxic properties of combustion or decomposition products that are known to be generated in significant quantities.

Revision Changes:

Section 16: Disclaimer (second paragraph) was modified.

Section 14: Transportation legal text was modified.

Section 1: Initial issue message was modified.

Section 2: Ingredient table was modified.

Section 16: Web address was added.

Section 1: Address was added.

Copyright was added.

Company logo was added.

Telephone header was added.

Company Telephone was added.

Section 1: Emergency phone information was added.

Section 1: Emergency phone information was deleted.

Company Logo was deleted.

Copyright was deleted.

Section 16: Web address heading was deleted.

Section 1: Address line 1 was deleted.

Section 1: Address line 2 was deleted.

DISCLAIMER: The information in this Material Safety Data Sheet (MSDS) is believed to be correct as of the date issued. 3M MAKES NO WARRANTY, EXPRESS OR IMPLIED, INCLUDING BUT NOT LIMITED TO, ANY IMPLIED WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE OR COURSE OF PERFORMANCE OR USAGE OF TRADE. User is responsible for determining whether the 3M product is fit for a particular purpose and suitable for user's method of use or application. Given the variety of factors that can affect the use and application of a 3M product, some of which are uniquely within the user's knowledge and control, it is essential that the user evaluate the 3M product to determine whether it is fit for a particular purpose and suitable for user's method of use or application.

3M provides information in electronic form as a service to its customers. Due to the remote possibility that electronic transfer may have resulted in errors, omissions or alterations in this information, 3M makes no representations as to its completeness or accuracy. In addition, information obtained from a database may not be as current as the information in the MSDS available directly from 3M.

3M USA MSDSs are available at www.3m.com